

Before the  
**Federal Communications Commission**  
Washington, DC 20554

In the Matter of

**EMERGENCY COMMUNICATIONS  
BY AMATEUR RADIO  
AND IMPEDIMENTS TO  
AMATEUR RADIO COMMUNICATIONS**

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**GN Docket No. 12-91**

**DA 12-523**

**COMMENTS IN RESPONSE TO PUBLIC NOTICE**

This is a response to selected questions asked in the above referenced proceeding, by Tom Blackwell, N5GAR, of Dallas, Texas.

Important comments follow on the subject of tax incentives for amateur repeater and remote facilities, RACES registration policies, use of amateur radio to directly contact local 911 dispatchers, and private land use contracts.

I hold an Amateur Extra class license. I am a Life Member of the ARRL and a Life Member of the Texas VHF-FM Society. A brief biography is available on the Internet at <http://www.qrz.com/db/N5GAR>

To organize this response, copies of the questions are included here.

**1. Importance of emergency Amateur Radio Service communications.**

**a. What are examples of disasters, severe weather, and other threats to life and property in which the Amateur Radio Service provided communications services that were important to emergency response or disaster relief? Provide examples of the important benefits of these services.**

**Best examples involve situations where amateurs transmit on frequencies recognized by the staff of the National Weather Service (NWS). FCC licensees who are employees of the NWS observe the communication and are able to engage amateurs in two-way communications. The information is used by this agency, and processed along with other information that results in decisions to issue official Warnings, Watches and official**

releases of information intended to help protect lives and property. Resulting NWS announcements are often used by other local agencies to make decisions about whether to activate warning sirens.

The NWS is not only essential for the protection of lives and property, there are implications involving homeland security interests that apply to the information gathered and disseminated by this agency.

b. Under what circumstances does the Amateur Radio Service provide advantages over other communications systems in supporting emergency response or disaster relief activities? Under what circumstances does the Amateur Radio Service complement other forms of communications systems for emergency response or disaster relief?

There is the advantage of a number of people participating together as one big conference call. One operator knows what has been said before, and the information does not have to be repeated.

With the advance of cell phones, local 911 operators receive repeated communication about single vehicle accidents from various people who do not realize an event has already been reported.

The public could also be well served, but in a technically more limited way, if there were a conference call channel on commercial cellular telephones, where a number of people could communicate together at one time on the subject of local weather, local traffic, or other community interest communication. However, amateur radio is not technically limited, as each transmitter is independent and capable of simplex communication, as well as content transmitted through a repeater, auxiliary or remote base.

c. What Federal Government plans, policies, and training programs involving emergency response and disaster relief currently include use of the Amateur Radio Service?

NWS Skywarn Schools. Those who are interested in these details should personally attend a Skywarn School. They are well organized and taught by graduate Meteorologists employed by this agency. The NWS has the budget for its staff to travel to local communities and provide this training.

What additional plans, policies, and training programs would benefit from the inclusion of Amateur Radio Service operations? How would Amateur Radio Service operations fit into these plans and programs?

**I would welcome additional training on the use of this new rule, for local authorities to make the best possible use of it:**

**<http://www.gpo.gov/fdsys/pkg/FR-2010-08-04/pdf/2010-19198.pdf>**

**d. What State, tribal, and local government plans, policies, and training programs involving emergency response and disaster relief currently include use of the Amateur Radio Service?**

**Acceptance of 911 emergency calls from repeater telephone autopatch facilities is effectively provided for in the FCC Rules. It is my hope that state and local government authorities will become better acquainted with rules that allow for on-air participation by persons who are employed by local government, not just during emergencies, but during drills and tests. As an original petitioner in the above referenced rule making, I will be available to discuss it with appropriate state and local government officials who wish to make the most of the opportunity.**

**Some 911 intake operators are licensed amateurs who listen to local repeater frequencies. There is capability to alert them with an announced series of control tones, or use of a special PL tone with the transmission - - to get their attention to an emergency report, so they are not required to listen continuously to non-emergency transmissions on a frequency. They are allowed to engage in two-way communication during these emergencies, as well as during drills and tests. The potential for this kind of use will improve as amateurs and served agencies get more experience with this practice.**

**What additional plans and programs would benefit from the inclusion of Amateur Radio Service operations? How would Amateur Radio Service operations fit into these plans and programs?**

**Advancement of the licensing of 911 operators as Amateurs, who listen to locally recognized and announced frequencies and with announced PL tones or other signaling tones to facilitate processing of emergency reports. This means a faster connection to the licensed amateur making the report than if a telephone autopatch is used to call 911.**

**With the recent rule changes, and the Commission's response to a petition submitted by the undersigned and others, no addition to the FCC Rules is required. For practical use it would require local officials using these arrangements to make the most of it, by announcing the method they prefer for amateurs to communicate directly with 911 or other emergency response intake. It would be helpful to establish a national standard for**

**this practice, that would be well understood by amateur licensees no matter where we may travel in the U.S.**

**e. What changes to the Commission's emergency communications rules for the Amateur Radio Service (Part 97, Subpart E) would enhance the ability of amateur operators to support emergency and disaster response? In addition, are there any specific changes that could be made to the technical and operational rules for the Amateur Radio Service (Part 97, Subparts B, C, and D) that would enhance the ability of amateur operators to support emergency and disaster response? What other steps could be taken to enhance the voluntary deployment and effectiveness of Amateur Radio Service operators during disasters and emergencies?**

**Encourage direct communication with local 911 intake, for reporting of emergencies. This does not require any rule changes.**

**Reinstate the rules prohibiting convicted felons from holding amateur licenses. This rule was removed from the books, apparently because no hearing had ever been designated on it. Since the rule was followed, the matter was settled, and enforcement complaints were not forthcoming.**

**I believe it is in the public interest that amateurs who are seriously involved in volunteering their time and resources to help with emergency communication, and the drills and tests involved, should not be expected to associate themselves with convicted felons. The same goes for children who hold amateur licenses.**

**My research shows a question was previously used on FCC license application forms, covering this issue. It was first adopted in 1963 and asked "Have you been convicted in Federal, state, or local court of any crime for which the penalty imposed was a fine of \$500 or more or an imprisonment of six months or more within 10 years previous to the date of this application?" I would like to see a question like this on our application forms again.**

**f. What training from government or other sources is available for Amateur Radio Service operators for emergency and disaster relief communications?**

**NWS Skywarn classes. These are well done where I live.**

**How could this training be enhanced? Should national training standards be developed for emergency communications response?**

**If local government adopts a policy to accept 911 emergency reports from the public directly via amateur radio, information about this could be included at NWS Skywarn schools, and maybe other training events.**

**I am pleased with the standards used by NWS and its capable staff to develop curriculum for its Skywarn classes.**

**The more standardized the procedures are nationwide, the easier it would be to develop a training standard for them, as well as for traveling amateurs to use the procedures.**

**g. What communications capabilities, e.g., voice, video, or data, are available from Amateur Radio Service operators during emergencies and disasters?**

**Data with APRS is available. Training for the preferred methods of communicating with the NWS staff using APRS facilities should be stated by the served agencies, where it is desired.**

**I would encourage the use of Amateur television repeaters during emergencies, that could transmit live video of storm conditions that could be observed live at the NWS office. For example, there is sufficient bandwidth in the UHF band for an input and an output frequency for NTSC video - - assuming there is not interference by repeater or auxiliary stations on these frequencies.**

**Are there any future technical innovations that might further improve the Amateur Radio Service?**

**I would expect to see additional development of networked digital audio resources, of the kind now known as "D-Star."**

**(h. Are national standards in data transmission needed to enhance the ability of Amateur Radio Service operators to respond to emergencies and disasters? Are there restrictions with regard to transmission speeds that, if removed, would increase the ability of operators to support emergency/disaster response? If so, what issues could arise from removing these restrictions?)**

**i. Would it enhance emergency response and disaster relief activities if Amateur Radio Service operators were able to interconnect with public safety land mobile radio systems or hospital and health care communications systems? What could be**

done to enable or enhance such interconnections? What issues could arise from permitting such interconnections?

See the above comments, regarding acceptance of 911 reports from the public directly via amateur radio. With this, a licensed amateur needing to report an emergency does not have to 'dial 911' on a telephone. Amateurs in my area have years of experience participating in RACES nets where the staff of the NWS is directly a part of the net, and no other means of communication is required for them to immediately receive the content of the message. The same practical arrangement can apply to 911 intake.

j. Should there be national certification programs to standardize amateur radio emergency communications training, mobilization, and operations? How would such programs improve emergency communications?

Yes. Amateurs with training in reporting during weather emergencies often find themselves traveling from location to location. They should be welcomed to transmit during RACES operations where ever they may be located. The transmission should not be discouraged or denied by the "control operator" of a local RACES net just because an FCC licensee and RACES registrant is not registered locally. Where that happens, relevant information that could be provided for consideration by the NWS staff, or other government emergency responders, is silenced by a prior restraint. (The First Amendment provides for redress of grievances to the government - - essentially what we have with the report of an emergency condition to a government office, such as the NWS or local 911 authority. There should be no prior restraint on such First Amendment activities. Inefficient or inappropriate handling of registrations in RACES can cause that.)

Do we need to bring back "RACES licenses" in the Amateur Service, issued by the FCC to show that the holder is trained in these operations by the NWS or other agency? It might be of interest for the Commission to open a comment period on this question.

Since the NWS conducts Skywarn schools, and issues certificates to those who complete them, and ultimately receives the information from these participants during weather emergencies, I recommend that the NWS also process and issue RACES registrations. At present, the training is substantially done by the NWS, with registrations in the RACES program handled in an irregular manner from local jurisdiction to local jurisdiction. Some local governments do not have a RACES at all, or even know what it is.

**2. Impediments to enhanced Amateur Radio Service communications. The statute also requires that the study identify impediments to enhanced Amateur Radio Service communications and recommendations regarding the removal of such impediments.**

**a. What private land use restrictions on residential antenna installations have amateur radio operators encountered? What information is available regarding the prevalence of such restrictions? What are the effects of unreasonable and unnecessary restrictions on the amateur radio community's ability to use the Amateur Radio Service? Specifically, do these restrictions affect the amateur radio community's ability to respond to disasters, severe weather, and other threats to lives and property in the United States? What actions can be taken to minimize the effects of these restrictions?**

**Amateurs who are interested in participating in emergency reporting should not go enter into contracts that restrict their own operating activities. They should have timely information and training by the private sector to understand these challenges. News services covering amateurs should publicize this issue, and the ways amateurs can avoid the problem.**

**Amateurs should come to know as much about the purchase of property that is suitable for installation of an amateur station, as they know about the antennas they use.**

**First, some popular methods of communication by amateurs is not regulated by even the most restrictive of private covenants, private contracts, deed restrictions, or homeowner associations.**

**These include:**

**Use of a hand held portable radio, a "talkie," for repeater or simplex operation. (These portable radios have been advertised in practically every amateur radio magazine and publication I have personally seen in the last 30+ years. Most are for the 2 Meter or UHF bands.).**

**Use of a mobile two-way radio in a vehicle, for repeater or simplex operation. (Most are for the 2 Meter or UHF bands.)**

**Remote operation of HF stations. ARRL has published a book on this. It is titled Remote Operating for Amateur Radio, Get on the Air from Anywhere! There is currently a description on the Internet, here: <http://www.arrl.org/shop/Remote-Operating-for-Amateur-Radio/> Opportunities exist for repeaters, remote bases and remotely located HF radios to be placed where they are not**

restricted, and operated remotely, as described in this book, either with a wired Internet connection, or by radio with a repeater, an auxiliary, or remote base. The practice has been demonstrated at local amateur radio clubs - - where a computer connected through the internet to an equipped HF radio is used for remote operation involving a microphone and speaker connected to a laptop computer.

Remote operation through repeaters, remote bases and auxiliary stations, generally.

Operation where delivery of a message involves other amateurs, at other locations, where the particular message is manually relayed. Messages of an emergency nature attract the volunteer help of other amateurs who are pleased to help deliver them. The ARRL provides discussion on this web page: <http://www.arrl.org/nts> A message that originates with a station operating with a hand held 'talkie' transceiver, can be delivered to a final destination long distances away, by other amateurs who volunteer to handle it. With new technologies, including that known as "D-Star," there is automatic digital handling of voice messages that originate from hand held transceivers. Policy makers should be made fully aware of these arrangements.

## Discussion

Private contracts that regulate the use of land can and do impact the ability of amateurs to operate with functions that are intended in the FCC Rules. Sometimes the impact is only for a minor portion of the kind of operating preferred by the licensee. Sometimes it is more.

It is my personal experience in shopping for a single family detached residence in Dallas, Texas, that there are neighborhoods where antenna installation is restricted, and other neighborhoods nearby where there is no restriction except for city zoning ordinances (governed by PRB-1). I made the choice to buy property where there was no private deed restriction that conflicts with antennas. There was little difficulty locating property with no such restrictions here. Amateurs should be advised to be careful, as in my case a matter of a few yards away from my property, is a contractually restricted development that does not welcome antennas. When asked about locating property that is legally suitable for an antenna installation, I tell friends to find a neighborhood where one or more antennas are already in use. With that they are likely to find similar nearby property that does not have a valid contractual restriction. These contractual restrictions



should be found as a public document in the deed records at the local County Courthouse.

In shopping for this residential property, I found: Property with no antenna restrictions, Property with certain restrictions where the real estate agent representing the seller was informed and able to answer my questions, Property with restrictions where the real estate agent either did not know or was not interested in answering my question - - preferring to try to change the subject, Property where a seller was interested in bargaining with the HOA to get contract restrictions on antennas removed in order to sell the property to me, Property where there were verbal representations that no restrictions were in place - - but where the County deed records showed that valid restrictions did apply, Property that once had restrictive covenants in place that had lapsed under their own terms or because they were not enforced - - where selective enforcement is not allowed, Property where there were no restrictions but where the next development, a matter of feet away, had restrictions.

Property owners sometimes find themselves with good reasons for wanting to restrict either some antennas, or all antennas, on property owned by others. Often this is because the residential property is high density, as in the case of small condominium structures that resemble rental apartments. Sometimes there is concern about a unique view from one property, where an owner has an advantage to look across another owner's air space for some distance. To maintain the practical value of the property, as well as the monetary value (including appraised value for property tax purposes), it is necessary to maintain and protect such a view.

There are situations where restrictions are not reasonable and not in the public interest. There are other situations where restrictions are reasonable, and where those who intend to operate amateur stations on bands that require certain antennas, should not be advised to purchase the property. These situations involve analysis on a case by case basis.

I am reminded of questions asked of FCC Commissioner nominees by a United States Senator from my state, who was on the Senate Nominations Committee questioning them at a public hearing. The Senator asked about the FCC's authority to allow tall commercial broadcast towers in residential neighborhoods. She warned the nominees that if they took legal action to allow these to be erected there, she would take action to stop them. This seems to be the popular position among constituents in my state.

If any action is taken on the matter of private contracts on the use of real estate for amateur antennas, it should be done by the Federal government, not the states. This is because these licenses are Federal licenses, the

**issue involves radio signals that travel across state lines, and because the public interest is a Federal interest that should not vary from state to state.**

**It is also not in the public interest for amateur licensees to be encouraged to get into unpleasant neighborhood fights over antennas. There are better answers available, where amateurs can deliver both emergency, and non-emergency message content without violating a contractual restriction, using the kind of equipment and arrangements described above.**

**b. What criteria distinguish “unreasonable or unnecessary” private land use restrictions from reasonable and necessary restrictions? How do local circumstances, such as neighborhood density or historic significance, affect whether a private land use restriction is reasonable or necessary? How does the availability of alternative transmitting locations or power sources affect the reasonableness of a particular private land use restriction?**

**The Texas “PRB-1” Law, which I worked for at the Texas Legislature, along with Karl Silverman, President of the Amateur Radio Club at the Johnson Space Center, provides for consideration of historicly significant buildings. We should work to see that this and similar requirements in the law are not exaggerated or misunderstood, where the intent of the legislation becomes unreasonable. So far I have not seen an example of an enforcement of this provision that was unreasonable.**

**Yes, it is reasonable to allow private sector initiatives to restrict some large antennas in some locations, with voluntarily agreements. Should a person who is licensed for 160 meters be able to live in a small condominium and expect to use the FCC Rules to place a tall Telex tower at his residence? No. Such private contracts do not restrict all means of amateur communication, such as those listed above in answer to other questions here. If a licensee finds it inconvenient that he can not use all bands, including 160 Meters, because of private contracts where he is a party, he should not give up on using his time for the other bands and opportunities that otherwise exist for use of his amateur license. If the person is willing to invest in a large, usually expensive antenna, he needs the appropriate land on which to erect it. In the case of emergencies, it is the content of the communication that counts, not the matter of which band the content was transmitted and received on.**

**There are solutions involving operating from remote locations, where good use of auxiliary communications is in place.**

**c. What steps can amateur radio operators take to minimize the risk that an antenna installation will encounter unreasonable or unnecessary private land use restrictions? For example, what obstacles exist to using a transmitter at a location not subject to such restrictions, or placing an antenna on a structure used by commercial mobile radio service providers or government entities?**

**Licensees should do good research before buying or leasing a property. They should become personally educated on this issue. A person should not buy real estate that is not compatible with rights that the person intends to exercise. It is sometimes best not to get into ugly fights with neighbors over very large antennas, close in proximity to another property's owner's investment. The ARRL and other publishers should provide education on this topic for their customers.**

**Tax deductions: Much of what amateurs do with emergency communications is done with FM repeaters. There are also legitimate practical uses of remotely located HF radios. It is in our interest to have good access to repeater sites, on tall buildings, on commercial radio towers, and on mountains. I recommend that where amateurs are using such communication to assist any official government organization, at any level, including the National Weather Service programs, the Federal government should provide tax deductions and tax incentives for those who provide equipment sites to the FCC licensed amateurs - - on these tall buildings, towers and mountains.**

**d. Do any Commission rules create impediments to enhanced Amateur Radio Service communications? What are the effects of these rules on the amateur radio community's ability to use the Amateur Radio Service? Do disaster and/or severe weather situations present any special circumstances wherein Commission rules may create impediments that would not otherwise exist in non-disaster situations? What actions can be taken to minimize the effects of these rules?**

**The NWS should provide registrations in RACES that are good nationwide, for amateurs who have completed one or more of the Skywarn classes.**

**It is not in the public interest for someone who has been trained in a NWS Skywarn class, who happens to travel to a different location, to observe reportable weather conditions but be told by some local "net control" that they are not welcome to transmit the content on a local RACES net, especially where the NWS office local to his position has Meteorologists listening to the net. I will have more to say about this if the FCC opens a further inquiry or opportunity for specific rule making.**

(e. What other impediments to enhanced Amateur Radio Service communications have amateur radio operators encountered? What are the effects of these impediments on the amateur radio community's ability to use the Amateur Radio Service? Specifically, do these impediments affect the amateur radio community's ability to respond to disasters, severe weather, and other threats to lives and property in the United States? What actions can be taken to minimize the effect of these impediments?)

(f. The legislation requires the Commission to identify "impediments to enhanced Amateur Radio Service communications." What specific "enhance[ments]" to Amateur Radio Service communications have been obstructed by the impediments discussed above?)

Respectfully submitted,

A handwritten signature in dark ink that reads "Tom Blackwell". The signature is written in a cursive, flowing style.

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